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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,055	12/07/2001	Antonio Colmenarez	US010546	7472

24737 7590 07/26/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/020,055

Applicant(s)

COLMENAREZ ET AL.

Examiner

Lawrence B. Williams

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-18 is/are rejected.
- 7) ☒ Claim(s) 6 and 19-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see Remarks/Arguments, filed 17 October 2005, with respect to the rejection(s) of claim(s) 1, 2, 11, 12 under USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bullock et al. (US 2002/0049036 A1).

### *Specification*

2. The disclosure is objected to because of the following informalities:

a.) On page 1, line 22 of the specifications; examiner suggest applicant replace the word "person" with "personal" .

b.) On page 8, line 3, examiner suggest applicant clarify the expression: "compatible the high speed".

c.) On page 8, line 4, the examiner suggest applicant clarify the expression: "the speeds to do not have to".

Appropriate correction is required.

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1).

(1) With regard to claim 1, Bullock et al. discloses in Fig. 1, a system for a cordless modem comprising: a base station (102) comprising means (111) for connection with a communication line (col. 5, lines 26-29); a remote unit (106-109) for connection with an interface of a modem (element 107 shows a modem, as is a modem inherent in element 108, the fax machine); at least one booster station (element 105; Bullock et al. discloses the extension unit amplifying the data signals from elements 106-109; pg. 3, paragraph 0074); said base station including means (103; through interface 112) for wireless communication with said remote unit; said remote unit comprising means (104) for wireless communication with at least said base station. Bullock et al. teaches the use of antenna 104 for use of transmitting from each of elements 106-109 to the base station 102. Gilbert does not however disclose said base station including means for testing and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between said base station and said remote unit.

However, Ruppel et al. discloses in Fig. 9, a base station (931) including means (950) for testing and selecting a frequency providing a strongest reception from a plurality of available

Art Unit: 2611

channels for wireless communication between a base station and a remote unit (elements 932-937; col. 7, lines 40-44, 53-60).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ruppel et al. with the invention of Bullock et al. as a method of providing the best available channel for data transmission over a wireless network (col. 2, lines 15-57).

(2) With regard to claim 7, claim 7 inherits all limitations of claim 1, above. As noted above, Bullock et al. in combination with Ruppel et al. disclose all limitations of claim 1 above. They do not however explicitly teach the remote unit is arranged in the case of a portable computer, Bullock et al. does teach the remote comprising a computer modem (107). One skilled in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.

(3) With regard to claim 10, though neither of the inventors disclose a remote unit including an antenna arranged on the case of a portable computer so that it is oriented upward when the computer is open, lap tops with antennae and antennae design in general are well known in the art and an antenna arranged on the case of a portable computer so that it is oriented upward when the computer is open would be a mere design choice of one skilled in the art.

(4) With regard to claim 11, Bullock et al. discloses in Fig. 1, a method for providing a system for a cordless modem; comprising the steps of: providing a base station (102) adapted for connection with a communication line (111); providing a remote unit (107, 108) adapted for connection with an interface of a modem (element 107 shows a modem, as is a modem inherent in element 108, the fax machine); providing wireless communication between said base station and said remote unit (Bullock discloses the base station communicating wirelessly with the

Art Unit: 2611

remotes 106-109; pg. 3, paragraph 0073 and also discloses the remote units 106-109 communicating wirelessly with the base station; pg. 3, paragraph 0074). Bullock et al. does not however disclose testing wireless transmissions between said base station and said remote unit; comparing a received signal strength from the remote unit with the wireless transmissions transmitted by the base station in step (d); repeating steps (d) and (e) for a plurality of channels having a strongest signal strength from among the plurality of channels.

However, Ruppel et al. discloses in Fig. 9, testing wireless transmissions between a base station (931) and said remote unit (932-937); comparing a received signal strength from the remote unit with the wireless transmissions transmitted by the base station in step (d); repeating steps (d) and (e) for a plurality of channels having a strongest signal strength from among the plurality of channels (col. 7, lines 25-67).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ruppel et al. with the invention of Bullock et al. as a method of providing the best available channel for data transmission over a wireless network (col. 2, lines 15-57).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 2002/0049036 A1) in view of Ruppel et al. (US Patent 5,737,705) as applied to claim 1 above, and further in view of Mahany et al. (US Patent 5,070,536).

As noted above, Bullock et al. in combination with Ruppel et al. disclose all limitations of claim 1 above. They do not however explicitly disclose wherein means for testing includes means for comparing levels of test patterns communicated between said base station and said remote unit.

Art Unit: 2611

However Mahany et al. teaches a mobile radio data communication system and method wherein he discloses means for testing including means for comparing levels of test patterns (Fig(s) 9A, B) communicated between said base station and said remote unit (Fig. 12, element 271; col. 16, lines 54 - col. 17, line 46).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Mahany et al. with the invention of Bullock et al. in combination with Ruppel et al. as a method of providing a reliable and efficient communications link (col. 3, lines 14-35).

7. Claim 3-5, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 2002/0049036 A1) in combination with Ruppel et al. (US Patent 5,737,705) in view of Mahany et al. (US Patent 5,070,536) as applied to claim 2 above, and further in view of Bullock et al. (US Patent 6,778,817 B1).

(1) With regard to claim 3, as noted above, Bullock et al. in combination with Ruppel et al. in view of Mahany et al. disclose all limitations of claim 2 above. They do not however disclose the system further comprising at least one booster station being in wireless communication with said base station and said remote unit, said booster station including receiving means for receiving information transmitted from said base station and said remote unit and transmitting means for transmitting information to said base station and said remote unit.

However Bullock et al. (6,778,817 B1) discloses in Fig. 2, a system for combining a wireless phone jack and RF wireless communications wherein the system comprises at least one booster station (106) being in wireless communication (104) with said base station and said

Art Unit: 2611

remote unit (109), said booster station including receiving means (105) for receiving information transmitted from said base station and said remote unit (108) and transmitting means (108, 105) for transmitting information to said base station and said remote unit (col. 4, lines 38-47).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. with the invention of Bullock et al. in combination with Ruppel et al. and Mahany et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(2) With regard to claim 4, claim 4 inherits all limitations of claim 2 above. Furthermore, Bullock et al. also discloses in Fig(s) 2, 3, wherein said base station (104) includes means for connection with a first electrical outlet (105), and said system further comprises at least one booster station (106) being in wireless communication with said remote unit (109), said booster station including means for connection with a second electrical outlet (105, 307), and said base station and said at least one booster station including means for communication over a common electrical wiring system between said first and second electrical outlets (col. 4, lines 30-57).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. with the invention of Bullock et al. in combination with Ruppel et al. and Mahany et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(3) With regard to claim 5, claim 5 inherits all limitations of claim 4 above. Furthermore, though neither of the references teach wherein said at least one booster station includes means



Art Unit: 2611

for testing and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between said booster station and said remote unit, and when reception between said at least one booster station and said remote unit is stronger than reception between said base station and said remote unit, said base station communicates with said at least one booster station only via the common electrical wiring system, Ruppel et al. discloses a wireless system wherein the base station includes means for testing and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between said base station and said remote unit. It would be obvious to one skilled in the art at the time of invention to apply this same method of choosing either another frequency or choosing the use of the wiring system to ensure the best reception for the system (col. 7, lines 25-65).

(4) With regard to claim 8, claim 8 inherits all limitations of claim 3, above. Though Bullock et al. does not explicitly teach the remote unit is arranged in the case of a portable computer, Bullock et al. does teach the remote comprising a computer modem (107). One skilled in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.

(5) With regard to claim 9, claim 9 inherits all limitations of claim 5, above. Though Bullock et al. does not explicitly teach the remote unit is arranged in the case of a portable computer, Bullock et al. does teach the remote comprising a computer modem (107). One skilled in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.

Art Unit: 2611

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 2002/0049036 A1) in view of Ruppel et al. (US Patent 5,737,705) as applied to claim 11 above, and further in view of Mahany et al. (US Patent 5,070,536).

As noted above, Bullock et al. in combination with Ruppel et al. disclose all limitations of claim 11 above. They do not however explicitly disclose wherein step (d) comprises generating a test pattern a test pattern for communication between said base station and said remote unit.

However Mahany et al. teaches a mobile radio data communication system and method wherein he discloses means for testing including means for comparing levels of test patterns (Fig(s) 9A, B) communicated between said base station and said remote unit (Fig. 12, element 271; col. 16, lines 54- col. 17, line 46).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Mahany et al. with the invention of Bullock et al. in combination with Ruppel et al. as a method of providing a reliable and efficient communications link (col. 3, lines 14-35).

9. Claims 13, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 2002/0049036 A1) in combination with Ruppel et al. (US Patent 5,737,705) as applied to claim 11 above, and further in view of Bullock et al. (US Patent 6,778,817 B1).

(1) With regard to claim 13, as noted above, Gilbert in combination with Ruppel et al. disclose all limitations of claim 11 above. They do not however disclose the system further comprising at least one booster station being in wireless communication with said base station and said remote unit, said booster station including receiving means for receiving information

Art Unit: 2611

transmitted from said base station and said remote unit and transmitting means for transmitting information to said base station and said remote unit.

However Bullock et al. (6,778,817 B1) discloses in Fig. 2, a system for combining a wireless phone jack and RF wireless communications wherein the system comprises at least one booster station (106) being in wireless communication (104) with said base station and said remote unit (109), said booster station including receiving means (105) for receiving information transmitted from said base station and said remote unit (108) and transmitting means (108, 105) for transmitting information to said base station and said remote unit (col. 4, lines 38-47).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. with the invention of Bullock et al. in combination with Ruppel et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(2) With regard to claim 15, Bullock et al. also discloses in Fig(s) 2, 3, wherein step (a) includes providing a connection (105) for said base station (104) to an electrical outlet of an electrical system; and step (g) includes providing the at least one booster station (106) with a connection to another electrical outlet (105, 307), of said electrical system; and (h) providing means (Fig. 3) for said base station and the at least one booster station to communicate over the electrical wiring system (col. 4, lines 30-57).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. with the invention of Gilbert in combination with Ruppel et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

Art Unit: 2611

(3) With regard to claim 17, Ruppel et al. discloses in Fig. 9, testing wireless transmissions between a base station (931) and a remote unit (932-937); comparing a received signal strength from the remote unit with the wireless transmissions transmitted by the base station in step (d); repeating steps (d) and (e) for a plurality of channels having a strongest signal strength from among the plurality of channels (col. 7, lines 25-67). Though Ruppel et al. does not teach explicitly teach the method between a booster station and a remote unit, he does disclose that alterations, modifications and variations would apparent to those skilled in the art in light of his description (col. 5, line 41- col. 6, line 7). Applicant claim constitutes a simply variation of Ruppel et al.'s disclosure.

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ruppel et al. with the invention of Gilbert as a method of providing the best available channel for data transmission over a wireless network (col. 2, lines 15-57).

10. Claims 14, 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 2002/0049036 A1) in combination with Ruppel et al. (US Patent 5,737,705) in view of Mahany et al. (US Patent 5,070,536) as applied to claim 12 above, and further in view of Bullock et al. (US Patent 6,778,817 B1).

(1) With regard to claim 14, claim 14 inherits all limitations of claim 12 above. As noted above, Bullock et al. in combination with Ruppel et al. and Mahany et al. disclose all limitations of claim 12, above. They do not however disclose the method further comprising: providing at least one booster station in wireless communication with said base station and said remote unit,

Art Unit: 2611

said booster station receiving and re-transmitting communications between said base station and said remote unit.

However, Bullock et al. (6,778,817 B1) also discloses in Fig. 2, the method further comprising: providing at least one booster station (106) in wireless communication with said base station (104) and said remote unit (109), said booster station receiving and re-transmitting communications between said base station and said remote unit (col. 4, lines 38-47).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Bullock et al. with the invention of Bullock et al. (2002/0049036 A1) in combination with Ruppel et al. and Mahany et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(2) With regard to claim 16, Bullock et al. also discloses in Fig(s) 2, 3, wherein step (a) includes providing a connection (105) for said base station (104) to an electrical outlet of an electrical system; and step (g) includes providing the at least one booster station (106) with a connection to another electrical outlet (105, 307), of said electrical system; and (h) providing means (Fig. 3) for said base station and the at least one booster station to communicate over the electrical wiring system (col. 4, lines 30-57).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. with the invention of Bullock et al. (2002/0049036 A1) in combination with Ruppel et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

Art Unit: 2611

(3) With regard to claim 18, Ruppel et al. discloses in Fig. 9, testing wireless transmissions between a base station (931) and a remote unit (932-937); comparing a received signal strength from the remote unit with the wireless transmissions transmitted by the base station in step (d); repeating steps (d) and (e) for a plurality of channels having a strongest signal strength from among the plurality of channels (col. 7, lines 25-67). Though Ruppel et al. does not teach explicitly teach the method between a booster station and a remote unit, he does disclose that alterations, modifications and variations would apparent to those skilled in the art in light of his description (col. 5, line 41- col. 6, line 7). Applicant claim constitutes a simply variation of Ruppel et al.'s disclosure.

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ruppel et al. as a method of providing the best available channel for data transmission over a wireless network (col. 2, lines 15-57).

#### *Allowable Subject Matter*

11. Claims 6, 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The instant applicant discloses a system and method for cordless communication between a modem of a computer and a communication line. A search of prior art records has failed to disclose a system " wherein said base station periodically tests wireless communication with said

Art Unit: 2611

remote unit and when reception between said base station and said remote unit is stronger than reception between said at least one booster station and said remote unit, said base station stops communicating with said at least one booster station via the common electrical wiring system and wirelessly communicates directly with said remote unit” as disclosed in claim 6. Nor does the prior art teach the method comprising “when reception between said at least one booster station and said remote unit is stronger than reception between said base station and said remote unit, communicating by said base station with the at least one booster station only via the electrical wiring system” or “periodically testing wireless communication with said remote unit and when reception between said base station and said remote unit is stronger than reception between the at least one booster station and said remote unit, said base station stops communicating with the at least one booster station via the common electrical wiring system and communicates directly with said remote unit by wireless communication” as disclosed in claims 19 and 21, respectively.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) Beamish et al. discloses in US Patent 6,653,932 B1 System And Method For Achieving Wireless Communications Coverage In A Local Area.

b.) Umstetter et al. discloses in US 2002/0115455 A1 Extended Range Cordless Telephone System And Coverage.

Art Unit: 2611

c.) Berlinsky discloses in US Patent 6,633,743 B1 Remote Wireless Communication Device.

d.) Gustafson discloses in US Patent 5,823,364 Distribution Wireless system Carrier Signals Within A Building Using Existing Power Line Wiring.

e.) Szabo discloses in US Patent 5,410,753 Mobile Test Set For A Mobile-Radio System.

f.) Thermon discloses in US 2005/0271020 A1 Cellular Network/Wlan VOIP Service Interaction By Home Wireless Router.

g.) Voros discloses in US 2004/0121648 A1 Network Device For Communicating Information.

h.) Fillebrown et al. discloses in 2001/0053134 A1 Router For A Personal Wireless Network.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037.

The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw  
July 17, 2006

  
**EMMANUEL BAYARD**  
**PRIMARY EXAMINER**